Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(d) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(e) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning the polarization states of oblique and skew rays of said modulated beam to provide a compensated modulated beam;

(f) wherein said wire grid polarization beamsplitter reflects said compensated modulated beam;

(g) a polarization analyzer which removes residual light of ~~said~~ an opposite polarization; and

(h) image-forming optics for forming an image from said compensated modulated beam.

2. (original) The apparatus of claim 1 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

3. (previously presented) The A-plate according to claim 2 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization beamsplitter.

4. (previously presented) The A-plate according to claim 2 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization beamsplitter.

5. (original) The apparatus of claim 1 wherein said reflective liquid crystal device has a vertically aligned construction.

6. (original) The compensator of claim 1 which modifies polarization states of the oblique and skew rays relative to said wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

7. (previously presented) A modulation optical system for providing high contrast modulation of an incident light beam, comprising:

(a) a pre-polarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(c) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(d) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning the polarization states of oblique and skew rays of said modulated beam to provide a compensated modulated beam;

(e) a polarization analyzer which removes residual light of the opposite polarization.

8. (original) The system of claim 7 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

9. (previously presented) The A-plate according to claim 8 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization beamsplitter.

10. (previously presented) The A-plate according to claim 8 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization beamsplitter.

11. (original) The system of claim 7 wherein said reflective liquid crystal device has a vertically aligned construction.

12. (original) The compensator of claim 7 which modifies polarization states of the oblique and skew rays relative to said wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

13. (currently amended) A modulation optical system for providing high contrast modulation of an incident light beam, comprising:

(a) a wire grid pre-polarizer for pre-polarizing said beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(c) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image

data thereon in order to form a modulated beam, and ~~for reflecting~~ then reflects said modulated beam back to said wire grid polarization beamsplitter;

(d) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning the polarization states of oblique and skew rays of said modulated beam to provide a compensated modulated beam; and

(e) a wire grid polarization analyzer which removes residual light of the opposite polarization.

14. (original) The system of claim 13 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

15. (previously presented) The A-plate according to claim 14 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization beamsplitter.

16. (previously presented) The A-plate according to claim 14 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization beamsplitter.

17. (original) The system of claim 13 wherein said reflective liquid crystal device has a vertically aligned construction.

18. (original) The compensator of claim 13 which modifies polarization states of the oblique and skew rays relative to said wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

19. (currently amended) A modulation optical system for providing high contrast modulation of an incident light beam, comprising:

(a) a wire grid pre-polarizer for pre-polarizing said beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(c) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and ~~for reflecting~~ then reflects said modulated beam back to said wire grid polarization beamsplitter;

(d) a wire grid polarization analyzer which removes unmodulated first polarization light; and

(e) a compensator which conditions the polarization states of oblique and skew rays relative to said wire-grid polarization analyzer and said wire grid pre-polarizer.

20. (original) The system of claim 19 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

21. (previously presented) The A-plate according to claim 20 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization analyzer.

22. (previously presented) The A-plate according to claim 20 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization analyzer.

23. (original) The system of claim 19 wherein said reflective liquid crystal device has a vertically aligned construction.

24. (original) The system of claim 19 wherein said compensator is located between said wire grid pre-polarizer and said wire grid polarization beamsplitter.

25. (original) The system of claim 19 wherein said compensator is located between said wire grid polarization beamsplitter and said wire grid polarization analyzer.

26. (withdrawn) A modulation optical system for providing high contrast modulation of an incident light beam, comprising:

(a) a wire grid pre-polarizer for pre-polarizing said beam of light;

(b) a transmissive liquid crystal device for selectively modulating said polarized beam of light having to encode image data thereon in order to form a modulated beam;

(c) a wire grid polarization analyzer which transmits said modulated beam and blocks light of the opposite polarization; and

(d) a compensator located between said wire grid pre-polarizer and said wire grid polarization analyzer which conditions oblique and skew rays.

27. (withdrawn) The system of claim 26 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

28. (withdrawn) The A-plate according to claim 27 wherein the optical axis of said A-plate is substantially parallel to the sub-wavelength wires of said wire grid polarization analyzer.

29. (withdrawn) The A-plate according to claim 27 wherein the optical axis of said A-plate is substantially perpendicular to the sub-wavelength wires of said wire grid polarization analyzer.

30. (withdrawn) The system of claim 26 wherein said reflective liquid crystal device has a vertically aligned construction.

31. (withdrawn) The apparatus of claim 26 wherein the polarization axis orientation of said wire grid pre-polarizer is perpendicular to the polarization axis orientation of said wire grid polarization analyzer.

32. (withdrawn) The apparatus of claim 26 wherein the polarization axis orientation of said wire grid pre-polarizer is parallel to the polarization axis orientation of said wire grid polarization analyzer.

33. (previously presented) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a wire grid pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(d) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(e) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning the polarization states of oblique and skew rays of said modulated beam to provide a compensated modulated beam;

(f) a wire grid polarization analyzer which removes residual light of the opposite polarization; and

(g) image-forming optics for forming an image from said compensated modulated beam.

34. (original) The system of claim 33 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

35. (previously presented) The A-plate according to claim 34 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization beamsplitter.

36. (previously presented) The A-plate according to claim 34 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization beamsplitter.

37. (original) The system of claim 33 wherein said reflective liquid crystal device has a vertically aligned construction.

38. (original) The compensator of claim 33 which modifies polarization states of the oblique and skew rays relative to said wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

39. (withdrawn) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a wire grid pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization;

(d) a reflective liquid crystal device for selectively modulating said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and for reflecting said modulated beam back to said wire grid polarization beamsplitter;

(e) a first compensator located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning oblique and skew rays of said modulated beam to provide a compensated modulated beam;

(f) a wire grid polarization analyzer which removes residual light of the opposite polarization;

(g) a second compensator for conditioning oblique and skew rays of said wire grid polarization beamsplitter relative to said wire grid polarization analyzer and said wire grid pre-polarizer; and

(h) image-forming optics for forming an image from said compensated modulated beam.

40. (withdrawn) The system of claim 39 wherein said first compensator and said second compensator each comprise one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

41. (withdrawn) The system of claim 39 wherein said reflective liquid crystal device has a vertically aligned construction.

42. (withdrawn) The first compensator of claim 39 which modifies polarization states of the oblique and skew rays relative to said wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

43. (previously presented) A method for projecting an image generated from image data, the method comprising:

(a) creating a polarized light beam;

(b) directing said polarized light beam to a wire grid polarization beamsplitter, transmitting incident light having a first polarization as a transmitted beam, and reflecting incident light having a second polarization as a reflected beam;

(c) modulating said transmitted beam from said wire grid polarization beamsplitter to encode image data at a reflective liquid crystal device and to provide a modulated beam;

(d) disposing a compensator in the path of said modulated beam to alter polarization states of oblique and skew light rays and thereby enhance the removal of leakage light from said modulated beam; and

(e) projecting said modulated beam to form said image.

44. (previously presented) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a wire grid pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(d) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(e) a wire grid polarization analyzer which removes residual light of the opposite polarization;

(f) a compensator for conditioning the polarization states of oblique and skew rays from said wire grid pre-polarizer and said wire grid polarization analyzer; and

(g) image-forming optics for forming an image from said modulated beam.

45. (original) The apparatus of claim 44 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

46. (previously presented) The A-plate according to claim 45 wherein the optical axis of said A-plate is substantially parallel to said sub-wavelength wires of said wire grid polarization beamsplitter.

47. (previously presented) The A-plate according to claim 45 wherein the optical axis of said A-plate is substantially perpendicular to said sub-wavelength wires of said wire grid polarization beamsplitter.

48. (original) The apparatus of claim 44 wherein said reflective liquid crystal device has a vertically aligned construction.

49. (original) The apparatus of claim 44 wherein said compensator is located between said wire grid pre-polarizer and said wire grid polarization beamsplitter.

50. (original) The apparatus of claim 44 wherein said compensator is located between said wire grid polarization beamsplitter and said wire grid polarization analyzer.

51. (previously presented) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(d) wherein said reflective liquid crystal device selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(e) a wire grid polarization analyzer which removes residual light of the opposite polarization;

(f) image-forming optics for forming an image from said modulated beam; and

(g) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device for conditioning the polarization states of oblique and skew rays of said modulated beam.

52. (previously presented) A display apparatus comprising:

(a) a light source for forming a beam of light;

(b) a pre-polarizer for polarizing said beam of light to provide a polarized beam of light;

(c) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization, wherein sub-wavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(d) wherein said reflective spatial light modulator selectively modulates said polarized beam of light having a first polarization to encode image data thereon in order to form a modulated beam, and then reflects said modulated beam back to said wire grid polarization beamsplitter;

(e) a compensator, located between said wire grid polarization beamsplitter and said reflective spatial light modulator, for conditioning the polarization states of oblique and skew rays of said modulated beam to provide a compensated modulated beam;

(f) wherein said wire grid polarization beamsplitter reflects said compensated modulated beam;

(g) a polarization analyzer which removes residual light of the opposite polarization; and

(h) image-forming optics for forming an image from said compensated modulated beam.

53. (withdrawn) The system of claim 26 wherein said compensator is located between said transmissive liquid crystal device and said wire grid polarization analyzer.

54. (withdrawn) The system of claim 26 wherein said compensator is located between said wire grid pre-polarizer and said transmissive liquid crystal device.

55. (currently amended) A modulation optical system for providing contrast modulation of an incident light beam, comprising:

(a) polarization optics including at least two wire grid polarization devices, where at least one of said wire grid polarization devices is a

wire grid polarization beamsplitter, and said incident beam of light interacts with said wire grid polarization beamsplitter with a portion reflected and another portion transmitted;

(b) a reflective liquid crystal device for selectively modulating a beam of light having to encode image data thereon in order to form a modulated beam, where said reflective liquid crystal device alters a polarization state of said beam of light in a controlled manner with said image data and reflects said modulated beam back to said wire grid ~~polarizing~~ polarization beamsplitter;

(c) a compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, for conditioning the polarization states of oblique and skew rays of said modulated beam; and

wherein the sub-wavelength wires on said wire grid polarization beamsplitter face said reflective liquid crystal device.

56. (previously presented) The system of claim 55 wherein said compensator comprises one or more birefringent layers, wherein said birefringent layers comprise at least one of the following; an A-plate film, a C-plate film, or a biaxial film.

57. (previously presented) The A-plate according to claim 56 wherein the optical axis of said A-plate is substantially parallel to the sub-wavelength wires of said wire grid polarization beamsplitter.

58. (previously presented) The A-plate according to claim 56 wherein the optical axis of said A-plate is substantially perpendicular to the sub-wavelength wires of said wire grid polarization beamsplitter.

59. (previously presented) The modulation optical system of claim 55 wherein said reflective liquid crystal device has a vertically aligned construction.

60. (previously presented) The compensator of claim 55 which modifies polarization states of the oblique and skew rays relative to said

wire grid polarization beamsplitter, or said reflective liquid crystal device, or both.

Claims 61-64 (canceled)

65. (withdrawn) The apparatus of claim 39 wherein the sub-wavelength wires of said wire grid polarization beamsplitter face towards said reflective liquid crystal device.

Claims 66-68 (canceled)

69. (presently presented) An electronic projection apparatus for projection of color images onto a display surface, said apparatus comprising:

(a) a light source which produces a beam of light;

(b) an optical system which separates said beam of light into separate color beams of light, and which provides beam shaping and focusing of said color beams of light;

(c) a modulation optical system for each of said color beams of light, said modulation optical system providing an image bearing color light beam, and said modulation optical system comprising:

(1) a prepolarizer for prepolarizing one of said colored beams of light to provide a polarized beam of light

(2) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective liquid crystal device;

(3) wherein said reflective liquid crystal device receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to

encode image data thereon, providing both modulated light and unmodulated light which differ in polarization;

(4) wherein said reflective liquid crystal device reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(5) wherein a polarization compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, is provided for conditioning oblique and skew light rays;

(6) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light;

(7) wherein a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light;

(d) a recombination prism for combining said image bearing color light beams corresponding to each of said color beams of light, into a full color image bearing beam; and

(e) a projection lens system for projecting said full color image bearing beam onto said display surface; and

wherein said pre-polarizer and said polarization analyzer in any of said modulation optical systems corresponding to a given color have different polarization properties from one another.

70. (previously presented) An electronic projection apparatus according to claim 69 wherein said pre-polarizer is a MacNielle type prism and said polarization analyzer is a wire grid polarizer.

71. (previously presented) An electronic projection apparatus according to claim 69 wherein said pre-polarizer and said polarization analyzer are both wire grid polarizers.

72. (previously presented) An electronic projection apparatus as in claim 69 wherein said reflective liquid crystal device receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

73. (previously presented) An electronic projection apparatus as in claim 69 wherein said reflective liquid crystal device receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

74. (previously presented) An electronic projection apparatus for projection of color images onto a display surface, said apparatus comprising:

(a) a light source which produces a beam of light;

(b) an optical system which separates said beam of light into separate color beams of light, and which provides beam shaping and focusing of said color beams of light;

(c) a modulation optical system for each of said color beams of light, said modulation optical system providing an image bearing color light beam, and said modulation optical system comprising:

(1) a prepolarizer for prepolarizing one of said colored beams of light to provide a polarized beam of light

(2) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(3) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode image data thereon, providing both modulated

light and unmodulated light which differ in polarization;

(4) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(5) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light;

(6) wherein a compensator, located between said wire grid polarization beamsplitter and said reflective spatial light modulator, is provided for conditioning the polarization states of oblique and skew light rays;

(7) wherein a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light;

(d) a recombination prism for combining said image bearing color light beams corresponding to each of said color beams of light, into a full color image bearing beam;

(e) a projection lens system for projecting said full color image bearing beam onto said display surface; and

wherein said pre-polarizer and said polarization analyzer in any of said modulation optical systems corresponding to a given color have different polarization properties from one another.

75. (previously presented) An electronic projection apparatus according to claim 74 wherein said pre-polarizer is a MacNielle type prism and said polarization analyzer is a wire grid polarizer.

76. (previously presented) An electronic projection apparatus according to claim 74 wherein said pre-polarizer and said polarization analyzer are both wire grid polarizers.

77. (previously presented) An electronic projection apparatus as in claim 74 wherein said reflective spatial light modulator receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

78. (previously presented) An electronic projection apparatus as in claim 74 wherein said reflective spatial light modulator receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

79. (presently presented) A modulation optical system for providing modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(c) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein a polarization compensator, located between said wire grid polarization beamsplitter and said reflective liquid crystal device, is provided for conditioning oblique and skew light rays;

(f) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light;

(g) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light; and

wherein said pre-polarizer and said polarization analyzer in said modulation optical system have different polarization properties from one another.

80. (previously presented) A modulation optical system according to claim 79 wherein said pre-polarizer is a MacNielle type prism and said polarization analyzer is a wire grid polarizer.

81. (previously presented) A modulation optical system according to claim 79 wherein said pre-polarizer and said polarization analyzer are both wire grid polarizers.

82. (previously presented) A modulation optical system as in claim 79 wherein said reflective spatial light modulator receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

83. (previously presented) A modulation optical system as in claim 79 wherein said reflective spatial light modulator receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

84. (previously presented) A modulation optical system for providing modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(c) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light;

(f) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light; and

wherein said pre-polarizer and said polarization analyzer in said modulation optical system have different polarization properties from one another.

85. (previously presented) A modulation optical system according to claim 84 wherein said pre-polarizer is a MacNielle type prism and said polarization analyzer is a wire grid polarizer.

86. (previously presented) A modulation optical system according to claim 84 wherein said pre-polarizer and said polarization analyzer are both wire grid polarizers.

87. (previously presented) A modulation optical system as in claim 84 wherein said reflective spatial light modulator receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

88. (previously presented) A modulation optical system as in claim 84 wherein said reflective spatial light modulator receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

89. (previously presented) A modulation optical system for providing modulation of an incident beam of light comprising:

(a) a wire grid polarization beamsplitter for receiving said beam of light and providing a polarized beam of light, by nominally transmitting the portion of said beam of light having a first polarization, and for nominally reflecting the portion of said beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(b) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and then selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(c) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(d) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light; and

(e) wherein said modulation optical system further comprises at least a second wire grid polarizer, which is either a pre-polarizer that interacts with said incident beam of light prior to said wire grid polarization beamsplitter, or is a polarization analyzer that follows said wire grid polarization beamsplitter, and receives said modulated light, and further removes any residual unmodulated light from said modulated light.

90. (previously presented) A modulation optical system as in claim 89 wherein said modulator is a liquid crystal display device.

91. (previously presented) A modulation optical system as in claim 89 wherein said liquid crystal display device is comprised of vertically aligned liquid crystal molecules.

92. (previously presented) A modulation optical system as in claim 89 wherein said reflective spatial light modulator receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

93. (previously presented) A modulation optical system as in claim 89 wherein said reflective spatial light modulator receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

94. (previously presented) A modulation optical system for providing high contrast modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(c) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein a polarization compensator, located between said wire grid polarization beamsplitter and said reflective spatial light modulator, is provided for conditioning oblique and skew light rays relative to said wire grid polarization beamsplitter, or said reflective spatial light modulator, or both;

(f) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light; and

(g) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light.

95. (currently amended) A modulation optical system as in claim 94 wherein said reflective spatial light modulator is a liquid crystal display device ~~is~~ comprised of vertically aligned liquid crystal molecules.

96. (previously presented) A modulation optical system as in claim 94 wherein said prepolarizer comprises a wire grid polarizer.

97. (previously presented) A modulation optical system as in claim 94 wherein said polarization analyzer comprises a wire grid polarizer.

98. (previously presented) A modulation optical system as in claim 94 wherein said reflective spatial light modulator receives said polarized beam of light having a first polarization, as was transmitted through said wire grid polarization beamsplitter.

99. (previously presented) A modulation optical system as in claim 94 wherein said reflective spatial light modulator receives said polarized beam of light having a second polarization, as was reflected from said wire grid polarization beamsplitter.

100. (previously presented) A modulation optical system for providing contrast modulation of an incident light beam comprising:

(a) a wire grid polarization beamsplitter for receiving said incident beam of light, for transmitting a portion of said incident beam of light having a first polarization, and for reflecting a portion of said incident beam of light having a second polarization nominally orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(b) wherein said reflective spatial light modulator receives a beam of light, having either a first polarization or a second polarization, and

selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(c) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(d) wherein a polarization compensator, located between said wire grid polarization beamsplitter and said reflective spatial light modulator, is provided for conditioning oblique and skew light rays relative to said wire grid polarization beamsplitter, or said reflective spatial light modulator, or both; and

(e) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light.

101. (previously presented) A modulation optical system for providing contrast modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization, wherein subwavelength wires on said wire grid polarization beamsplitter face a reflective spatial light modulator;

(c) wherein said reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein a polarization compensator, provided adjacent to said wire grid polarization beamsplitter, conditions the oblique and skew light rays relative to said wire grid polarization beamsplitter, or said reflective spatial light modulator, or both; and;

(f) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light; and

(g) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light.

102. (previously presented) A modulation optical system for providing contrast modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization;

(c) a reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein a polarization compensator, located between said wire grid polarization beamsplitter and said reflective spatial light modulator, conditions the oblique and skew light rays relative to said wire grid polarization beamsplitter, or said reflective spatial light modulator, or both; and;

(f) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light; and

(g) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light.

103. (previously presented) A modulation optical system for providing contrast modulation of an incident light beam comprising:

(a) a prepolarizer for pre-polarizing said beam of light to provide a polarized beam of light;

(b) a wire grid polarization beamsplitter for receiving said polarized beam of light, for transmitting said polarized beam of light having a first polarization, and for reflecting said polarized beam of light having a second polarization orthogonal to said first polarization;

(c) a reflective spatial light modulator receives said polarized beam of light, having either a first polarization or a second polarization, and selectively modulates said polarized beam of light to encode data thereon, providing both modulated light and unmodulated light which differ in polarization;

(d) wherein said reflective spatial light modulator reflects back both said modulated light and said unmodulated light to said wire grid polarization beamsplitter;

(e) wherein a polarization compensator, located in the portion of the optical path that includes said wire grid polarization beamsplitter and said reflective spatial light modulator, conditions the oblique and skew light rays relative to said wire grid polarization beamsplitter, or said reflective spatial light modulator, or both;

(f) wherein said wire grid polarization beamsplitter separates said modulated light from said unmodulated light; and

(g) a polarization analyzer receives said modulated light, and which further removes any residual unmodulated light from said modulated light.